

IN THE CLAIMS

Claims 1, 7, 19, 21, 32-36, 38, 39, and 41 are amended herein. Claim 31 is cancelled herein. Claims 47-49 have been added. All pending claims are reproduced below.

1 1. (Amended) A method for receiving an output signal from one of a first wireless
2 communication device system operating in a first frequency range or a second wireless
3 communication device system operating in a second frequency range, the method comprising:

4 receiving the output signal at a processor;

5 identifying whether the first wireless communication device system or the second
6 wireless communication device system sent the output signal based on
7 information included in the output signal; and

8 implementing a protocol that corresponds to the identified wireless communication
9 device system, wherein in response to identifying the first wireless
10 communication device system, a first protocol is implemented, and in
11 response to identifying the second wireless communication device system, a
12 second protocol is implemented.

1 2. (Original) The method of claim 1 wherein the output signal is one of a baseband signal
2 and a broadband signal.

1 3. (Previously Amended) The method of claim 1 wherein the first frequency range is from
2 about 100 KHz to about 1 GHz.

1 4. (Previously Amended) The method of claim 1 wherein the first frequency range is from
2 about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

1 5. (Previously Amended) The method of claim 1 wherein the second frequency range is
2 from about 1 GHz to about 10 GHz.

1 6. (Previously Amended) The method of claim 1 wherein the second frequency range is
2 from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.

1 7. (Amended) The method of claim 1 wherein the processor has a first process for detecting
2 and processing an output signal from the first wireless communication device system, and a
3 second process for detecting and processing an output signal from the second wireless
4 communication device system.

1 8. (Original) The method of claim 1 further comprising:
2 decoding a set of MAC information associated with the output signal.

1 9. (Original) The method of claim 1 further comprising:
2 decoding and formatting data associated with the output signal.

b1 1 10. (Previously Amended) The method of claim 1 further comprising:
2 verifying data associated with the output signal is valid; and
3 responsive to the data being valid, transmitting the data to a data port that is
4 operatively coupled to the processor.

1 17. (Previously Amended) The method of claim 1 wherein the method is implemented by at
2 least one of software, firmware, or hardware.

1 19. (Amended) A system for receiving an output signal from one of a first wireless
2 communication device system operating in a first frequency range or a second wireless
3 communication device system operating in a second frequency range, the system comprising:

4 a processor for receiving the output signal, wherein the processor is adapted to:

5 identify whether the first wireless communication device system or the
6 second wireless communication device system sent the output
7 signal based on information included in the output signal; and

8 implement a protocol that corresponds to the identified wireless
9 communication device system, wherein in response to identifying
10 the first wireless communication device system, a first protocol is
11 implemented, and in response to identifying the second wireless
12 communication device system, a second protocol is implemented.

1 20. (Previously Amended) The system of claim 19 wherein the processor has access to a
2 memory that is configured to receive the output signal.

1 21. (Amended) The system of claim 20 wherein the memory has a first section and a second
2 section, wherein the first section has a first process for detecting and processing an output signal
3 from the first wireless communication device system, and the second section has a second
4 process for detecting and processing an output signal from the second wireless communication
5 device system.

1 22. (Original) The system of claim 19, wherein the output signal is one of a baseband signal
2 and a broadband signal.

1 23. (Previously Amended) The system of claim 19 wherein the first frequency range is from
2 about 100 KHz to about 1 GHz.

1 24. (Previously Amended) The system of claim 19 wherein the first frequency range is from
2 about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

1 25. (Previously Amended) The system of claim 19 wherein the second frequency range is
2 from about 1 GHz to about 10 GHz.

1 26. (Previously Amended) The system of claim 19 wherein the second frequency range is
2 from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.

1 27. (Previously Amended) The system of claim 19 wherein the processor is adapted to:
2 decode a set of MAC information associated with the output signal.

1 28. (Previously Amended) The system of claim 19 wherein the processor is adapted to:
2 decode and format data associated with the output signal.

1 29. (Previously Amended) The system of claim 19 wherein the processor is adapted to:
2 verify data associated with the output signal is valid; and
3 responsive to the data being valid, transmit the data to a data port that is operatively
4 coupled to the processor.

31. (Cancel)

32. (Amended) The system of claim 19 wherein the processor is a component of one of the first wireless communication device ~~system~~ or the second wireless communication device ~~system~~.

33. (Amended) A computer readable medium comprising a plurality of instructions, which when executed by a processor, cause the processor to perform the steps of:

identifying whether a first wireless communication device ~~system~~ operating in a first frequency range or a second wireless communication device ~~system~~ operating in a second frequency range sent an output signal received by the processor, wherein the identifying is based on information included in data packets comprising the output signal; and

implementing a protocol that corresponds to the identified wireless communication device ~~system~~, wherein in response to identifying the first wireless communication device ~~system~~, a first protocol is implemented, and in response to identifying the second wireless communication device ~~system~~, a second protocol is implemented.

34. (Amended) A receiver apparatus for receiving wireless communications from a number of wireless communication devices ~~systems~~, the apparatus comprising:

a first I/O port for receiving communication information from a first wireless device ~~of a first communication system~~ operating in a first frequency range;

a second I/O port for receiving communication information from a second wireless device ~~of a second communication system~~ operating in a second frequency range; and

a processor for effecting upon received communication information a protocol that corresponds to one of the first or second wireless communication devices ~~systems~~ in response to determining which wireless communication device ~~system~~ sent the communication information.

1 35. (Amended) The apparatus of claim 34, further comprising:

2 a third I/O port for receiving communication information from a ~~second~~ third wireless
3 device ~~of the first communication system~~ operating in the first frequency
4 range.

1 36. (Amended) The apparatus of claim 35, wherein the first wireless communication device
2 system has a ~~first~~ communication channel for a wireless keyboard and the third wireless
3 communication device has a ~~second~~ communication channel for a wireless mouse, and
4 communication information from the wireless keyboard is received by the first I/O port, and
5 communication information from the wireless mouse is received by the third I/O port.

1 37. (Previously Added) The apparatus of claim 34, further comprising:

2 a data port operatively coupled to the processor for providing an interface between
3 the apparatus and a host system.

1 38. (Amended) The apparatus of claim 34, wherein the communication information from the
2 second wireless communication device ~~of the second communication system~~ is provided to the
3 second I/O port by a media access control module associated with the second wireless
4 communication device system.

1 39. (Amended) The apparatus of claim 34, further including a memory operatively coupled to
2 the processor, the memory storing a set of instructions that, when executed by the processor,
3 cause the processor to determine from which wireless communication device system
4 communication information was received, and to effect a protocol corresponding to that wireless
5 communication device system.

1 40. (Previously Added) The apparatus of claim 34, wherein the I/O ports and the processor
2 are included in a microcontroller unit.

1 41. (Amended) The apparatus of claim 34 wherein the I/O ports and the processor are
2 components of one of the first wireless communication device system or the second wireless
3 communication device system.

1 42. (Previously Added) The apparatus of claim 34 wherein the output signal is one of a
2 baseband signal and a broadband signal.

1 43. (Previously Added) The apparatus of claim 34 wherein the first frequency range is from
2 about 100 KHz to about 1 GHz.

1 44. (Previously Added) The apparatus of claim 34 wherein the first frequency range is from
2 about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

B/ 1 45. (Previously Added) The apparatus of claim 34 wherein the second frequency range is
2 from about 1 GHz to about 10 GHz.

1 46. (Previously Added) The apparatus of claim 34 wherein the second frequency range is
2 from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.

1 47. (New) The method of claim 1 wherein the identifying includes determining a device
2 type.

1 48. (New) The method of claim 47, wherein the device type is one of a mouse, a keyboard,
2 or a cell phone.

1 49. (New) The method of claim 47, wherein in response to determining the type of the
2 wireless communications device to be a mouse, implementing the corresponding protocol
3 includes formatting payload data in the output signal as cursor position data.